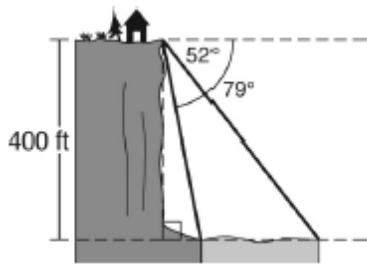


Geometry Chapter 10 Practice Test**Multiple Choice**

Identify the choice that best completes the statement or answers the question.

- _____ **1** Which is next in the sequence?
360, 180, 60, 15, . . .
A) 3 C) 3.75
B) 5 D) 7.5
- _____ **2** Which are angle measures of a right triangle?
F) 60° , 60° , 60° H) 27° , 63° , 90°
G) 14° , 83° , 83° J) 45° , 55° , 80°
- _____ **3** Which are the side lengths of an obtuse triangle?
A) 8, 11, 15 C) 8, 9, 11
B) 8, 11, 11 D) 8, 8, 11
- _____ **4** Three sides of a right triangle measure 5, 12, and 13 units. What is the measure of the smallest angle to the nearest degree?
F) 23° H) 65°
G) 25° J) 67°

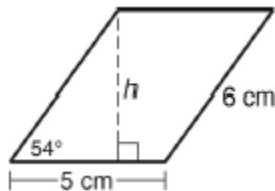
- 5 From the top of a canyon, the angle of depression to the far side of the river is 52° . The angle of depression to the near side of the river is 79° . The depth of the canyon is 400 feet. To the nearest foot, how wide is the river at the bottom of the canyon?



- A) 104 ft C) 235 ft
B) 204 ft D) 785 ft

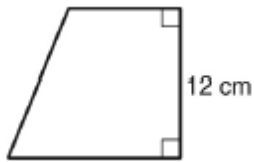
Short Answer

- 1 Express the area of an equilateral triangle in terms of the length s of a side.
- 2 Find the area of the parallelogram.

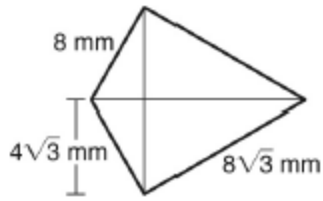


- 3 The longer diagonal of a rhombus is equal to $\sqrt{3}$ times one of its sides. The length of a side is 6 inches. Determine the area of the rhombus. Leave your answer in simplest radical form.

- 4 The midsegment of the trapezoid has a length of 11.5 cm. Find the area of the trapezoid.



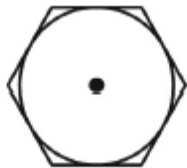
- 5 Find the area of the kite.



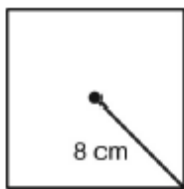
- 6 The area of an equilateral triangle is equal to the area of a trapezoid. The trapezoid has bases with lengths 4 centimeters and 14 centimeters and an altitude of $4\sqrt{3}$ centimeters. Determine the perimeter of the triangle.

- 7 A circle is circumscribed about a square. The square has side lengths of 8 inches. Find the circumference of the circle in terms of π . Leave your answer in simplest radical form.

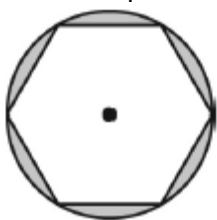
- 8 A regular hexagon is circumscribed about a circle. The circle has a radius of 9 feet. Find the area of the hexagon to the nearest tenth.



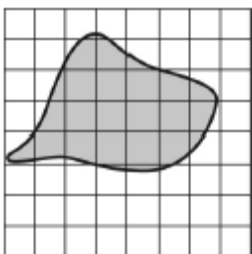
- 9 Find the area of the square.



- 10 The radius of the circle circumscribed around the regular hexagon is 10 centimeters. Find the area of the shaded part of the figure to the nearest tenth.



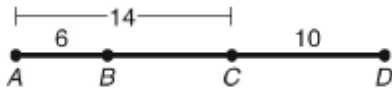
- 11 Sod is going to be placed over an irregularly shaped area. If sod costs \$6 a square yard, estimate the cost of the sod needed to cover the area. The grid has squares with side lengths of 2 feet.



- 12 Find the perimeter of the polygon with vertices $A(-2,3)$, $B(1,5)$, $C(1,0)$, and $D(-2,-2)$. Round your answer to the nearest tenth.

- 13 Find the area of a circle centered at $(1, 1)$ that passes through the point $(-2, 6)$. Round your answer to the nearest tenth.
- 14 Find the area of the polygon with vertices $D(4, 1)$, $E(2, 4)$, $F(-3, 2)$, and $G(0, -4)$.
- 15 Determine the effect on the area of a parallelogram if the height is multiplied by 3 and the base is multiplied by 6.
- 16 A circle has a diameter of 5 feet. If the circumference is multiplied by $(2x + 4)$, find the area of the new circle.

- 17 A point is chosen randomly on \overline{AD} . Find the probability the point is on \overline{BC} or \overline{CD} .



- 18 A weather channel covers local weather 6 times per hour for a period of 2 minutes. If you turn to the weather channel 5 times, predict how often you will catch the local weather.